DOCUMENT RESUME

ED 222 233 JC 820 508

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TITLE Oregon Community College Economic Impact Study: A Guidebook.
INSTITUTION Mount Hood Community Coll., Gresham. OR. Office of Research.
PUB DATE Oct 82
NOTE 84p.

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS Data Analysis; Data Collection; *Economic Research; *Educational Economics; Information Dissemination; Intercollegiate Cooperation; Planning; Publicity; Questionnaires; Research Design; *Research Methodology; Research Problems; *Research Utilization; *State Surveys
IDENTIFIERS *Economic Impact Studies; *Oregon

ABSTRACT

Based on the experience of developing and implementing a cooperative study of the economic impact of Oregon's community colleges, this guidebook describes the process of conducting the study in order to assist institutions planning to undertake similar investigations. In Part I, the purpose, focus, and scope of the Oregon study are reviewed, and the possible advantages and disadvantages considered prior to its implementation are cited. Key factors in the early planning phase are examined in part II, including sponsors, staff enthusiasm, scheduling, control and coordination, and team selection. This section also identifies hindrances encountered during the study, including insufficient lead time; disagreement about economic impact models; and the outdatedness and limited applicability of existing models. Part II concludes by discussing options for further studies. Part III details study methodology, focusing on initial planning at state and college levels, data collection and processing, and final study review by a consortium of college representatives. Part IV discusses the dissemination of study findings through press releases, in-house publications, other college informational materials, and reports to college boards. This section also cites the study's achievements in supporting and defending the community colleges, creating a case study procedure, and establishing a cooperative model for Oregon community colleges. Appendices include a bibliography, survey instruments, and informational materials. (KL)

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OREGON COMMUNITY COLLEGE ECONOMIC IMPACT STUDY: A GUIDEBOOK

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October 1982

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ACKNOWLEDGEMENTS

The "contributing" authors truly contributed, and provided numerous and useful editing suggestions as well. I hope the end result, this guidebook, reads not as six separate articles, but as one document. I accepr full responsibility for its final state.

Thanks to each of you for meeting deadlines and for your patience when I didn't!

Mary K. Kinnick

October, 1982

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PREFACE

This guidebook has been prepared to assist other institutions, particularly community colleges, who individually or in cooperation with others plan to undertake an economic impact study. We believe the experience of developing and implementing this cooperative statewide study resulted in insights which are worth sharing, and are indeed, important to share with our colleagues at sister institutions.

Our major concern in preparing the guidebook has been to provide a comprehensive outline of what we believe to be an effective study process and to highlight some of the potential problems and pitfalls those undertaking such studies are likely to encounter. Our hope is that the availability of this booklet will in some measure improve the quality of future economic impact studies and encourage a greater number of cooperative, joint study efforts among postsecondary institutions.

The guidebook does not prescribe any particular technical formula for use in deriving economic impact nor does it suggest adoption of any particular economic impact model. A comprehensive bibliography has been prepared, however, and provides ample examples of alternative methodologies including the one used by the Oregon colleges.

For more information about the preparation and results of the Oregon study, please contact: Research Office, Mt. Hood Community College, 26000 S.E. Stark Street, Gresham, Oregon 97030 (503-667-7422). The following documents are available, at cost, and may be ordered from this same office.

- The Impact of Community Colleges on Oregon's 1980-81 Economy, March 1982.

- The packet of background materials and proposed study procedures distributed to Oregon community college study coordinators prior to their initial meeting.

- Several planning checklists and other correspondence which transpired between the statewide coordinator or the consultant and local study coordinators.

- Final study plans for each community college participating in the study.

PART I: BACKGROUND

PURPOSE

At a time of slumping business activities and rising unemployment, community colleges are well suited to meet the special educational needs created by depressed economies, changing technology, and job displacements. These colleges are a valuable state resource in the fight for economic recovery. In such a situation, however, community college budgets are being trimmed with prospects for more drastic budget cuts in the future.

Influenced by this set of circumstances, the purpose of the 1982 Oregon Community College Economic Impact Study was to describe the impact of Oregon's community colleges on the state's economy, as well as the impact of each community college on its own district's economy. While community colleges are not an industry which produces a tangible product, they provide crucial services which take individuals from "where they are" to "where they want to be." In so doing, the community colleges improve the social and economic welfare of Oregon citizens.

In 1981, the presidents of the Oregon community colleges concluded that the time had come to tell "the community college story" to the governor, the state legislature, and district taxpayers. A key part of this story is the size of the economic impact that colleges have on the state and local economies. Included in this economic impact are such items as payrolls, college purchases, student spending, and other economic contributions.

The decision to undertake an economic impact study was based on information from several states where similar community college studies have been conducted (i.e., Illinois, Maryland, and Michigan). In these states, the

colleges found they were able to deal with their state legislatures and taxpayers in a more positive fashion when defensible, statistical information was available concerning their impact on the state's economy. Although the Oregon community colleges had not previously undertaken a study of this magnitude, it was felt that this was an opportune time to do so.

FOCUS AND SCOPE

The Oregon community college's economic impact study did not deal with the primary areas of impact of community colleges (i.e., their social and educational impact). This study focused solely on one secondary impact of community colleges--the direct cash flow economic impact. For purposes of this study, the definition of economic impact was "the additional money in circulation within the state or a college's district due to the existence of the college." The economic impact was calculated as a direct plus indirect impact. The direct impact is the sum of the identified institutional, staff, and student expenditures. The indirect impact is the product of the direct impact times an identified multiplier.

The 1981-82 Oregon economic study included the following 13 Oregon community colleges:

- Blue Mountain Community College
- Central Oregon Community College
- Chemeketa Community College
- Clackamas Community College
- Clatsop Community College
- Lane Community College
- Linn-Benton Community College
- Mt. Hood Community College

- Portland Community College
- Rogue Community College
- Southwestern Oregon Community College
- Treasure Valley Community College
- Umpqua Community College

In addition, the study included Tillamook Bay Campus and Treaty Oaks Education Center.

In order to insure the consistency, validity, and reliability of the data, each community college appointed a local study coordinator and collected similar data during a specified time frame. Mt. Hood Community College compiled the data and prepared the appropriate reports for state and local use. An independent researcher monitored and provided technical assistance on the study's procedures, conducted an audit of the data, and responded to the reported results. Dr. Mary Kinnick of Kinnick & Associates (Portland, Oregon) provided this essential audit capability. Dr. Michael Stevenson, Mt. Hood Community College, served as the statewide coordinator of the study.

The plan for the impact study was derived from the following sources:

(1) John Caffrey and Herbert Isaac's book entitled Estimating the Impact of a College or University on the Local Economy. Published by the American Council on Education in 1971, the Caffrey and Isaac model uses generally accepted economic principles and has received wide acceptance by U.S. colleges and universities.

(2) The 1977 study entitled "The Economic Impact of Maryland Community Colleges." This study was commissioned by the Maryland State Board for Community Colleges and was adapted from the Caffrey and Isaac's model.

(3) The 1979 study entitled "The Economic Impact of Six Community Colleges

in Illinois." This study was commissioned by the Illinois Community College Board and used techniques provided for in the Caffrey and Isaac's model.

Since this was Oregon's initial effort at such a joint study, only a portion of the total economic picture was taken into account. The colleges sought to gather only global information concerning the key economic benefits of having community colleges in Oregon and in local communities. The study, based on the Caffrey-Isaac's model, provided information on both the direct and indirect local and state impact of Oregon community colleges. Factors included in deriving direct dollar impact were:

- college expenditures
- gross salaries paid to staff
- disposable income of staff
- staff expenditures (in-district and out-of-district)
- student expenditures (in-district and out-of-district)
- college expenditures spent locally and in state
- number of students (full-time and part-time)
- number of local jobs attributed to the presence of the college

Other measures are proposed in the Caffrey-Isaac's model. However, due to the nature of this initial study, these factors were not included in the 1982 Oregon study. Among the factors not examined by this study were:

- value of in-district business property committed to college-related business
- expansion of the in-district banks' credit base resulting from college-related deposits
- in-district business volume unrealized because of the college enterprises

- college-related revenues received by local governments
- value of municipal services self-provided by the college
- operating costs of the in-district government-provided municipal and public services allocated to college-related influences
- value of local government properties allocated to college-related portion (if service is provided)
- property taxes forgone through the tax-exempt status of the college

The aim of the Oregon Community College Economic Impact Study was to derive estimates of the economic impact of Oregon's community colleges on the state and on local districts. We recommend that others contemplating such a study be clear about the potential advantages and disadvantages associated with a study of this kind and from the outset, be clear about how the results will be used.

WHY BOTHER AND SO WHAT?

In assessing the worth of launching a relatively time-consuming and expensive (in terms of staff time) project, we obviously decided the potential advantages outweighed the disadvantages. Local and statewide circumstances in other regions and in other times may result in a different conclusion. Some of the possible advantages and disadvantages we identified are:

Possible Advantages

1. A study of the short-run economic impact of community colleges can inform the public that these colleges do not operate in a financial vacuum;

2. Such a study can demonstrate that community colleges are not a "drag" on the economy of their region, and, in many areas, especially rural

ones, a college can be a major or the major activity (business) of the region;

3. An economic impact study is something the business community understands and thus can have a positive influence on their attitudes toward college operating levies;

4. Through a proper public relations program, the results of an economic impact study can have a positive influence on voters and legislators increasing the likelihood of continued financial support of community colleges; and

5. Once an economic impact study is completed, it can serve as a model for future studies, and trends overtime may be noted.

Possible Disadvantages

1. An economic impact study does not really address (show) the central (primary) mission of the college--education--and risks limiting the public's understanding of the community college;

2. An economic impact study can expose college expenditures which may not be generally understood by the public, thereby opening the door for various critics;

3. The study could appear to be self-serving; that is, some people may think the study is designed to show a highly favorable impact in an effort to garner more support; and

4. Conducting the study can be expensive. The Oregon community colleges were fortunate to have available the services of research staff and

the data processing and secretarial facilities of Mt. Hood Community College.

On balance we believe the overall results of the study were favorable for several reasons. The general findings and some of the data from the statewide study were used by the Oregon Community College Assembly (OCCA) to publicize the positive economic impact of the community colleges on the State of Oregon. This was accomplished through articles appearing in major newspapers in the state and by coverage of a press conference by a local television program.

The results of the data of the individual colleges could be and were used in a variety of ways. Each college selected its own method for distributing the results as they related to its own districts. In most cases, the local newspapers and radio stations carried articles on the economic impact on the college district. Appendix 6 provides examples of local newspaper articles.

Some of the colleges used the results in literature developed for use in publicizing the budget levy elections. Results of the studies were also presented in person by college representatives to various service clubs and other organizations in the local districts.

PART II: EARLY PLANNING CONSIDERATIONS-- KEY FACTORS FOR A SUCCESSFUL STUDY

As we debriefed ourselves about the study process and results, consensus quickly emerged on a series of factors which we agreed facilitated or hindered conduct of the study. We have labeled these "helping" and "hindering" factors and have arranged them for review in outline form below. We recommend that any group contemplating a study of this kind consider these factors at the outset.

Of the "helping" factors, the most important was the high priority given to the project by college presidents.

Helping Factors	Hindering Factors (Watch Out!)
· Leadership and support from college presidents	· Insufficient lead time for planning and a short total time frame
· A perceived need for information by the legislature	· Disagreement and/or lack of understanding of economic impact models and of particular multipliers
· The adoption of a fixed time-frame for completing the study	· Outdatedness of available study models and limited application of these models to the community college
· A challenging, motivating and generally positive experience of collaboration among professionals with respect for one another	
· The availability of central data processing facilities and programming skills	
· The use of an outside, independent consultant	

Helping Factors	Hindering Factors (Watch Out!)

(continued)

- A single point of project responsibility and for communication facilitation
- A highly qualified study team of local college study coordinators

A. HELPING FACTORS

1. Sponsors

The college presidents considered the study important. They felt the study would provide them information they wanted immediately. The Oregon State Legislature was discussing community college funding and needed information on the importance of community colleges in Oregon. College district voters were soon to be presented with college operating and construction levy requests, and they needed information to make good choices. Therefore, the presidents were motivated to provide leadership and to allocate staff and other resources to the project. Their support gave the project emphasis, visibility, and adequate resources.

2. Staff Enthusiasm

The institutional research staff at the colleges also gave the study considerable priority. The emphasis by the presidents contributed to this interest, but also, the topic was perceived by the study team to be useful and needed. Although some Oregon community colleges had completed similar work on district impact in the past, most of this work was limited and

outdated. Furthermore, no previous study of the statewide impact of the total Oregon community college system had been conducted.

Because the proposed study was to be statewide and existing methodology modified for community college use, a considerable research challenge existed, and a high degree of peer interaction/cooperation was needed. So, not only was the study perceived to be useful, but also interesting and fun.

Finally, those involved found the study to be something positive during a generally negative time. In a period of declining budgets and staff reductions, and when researchers were continually faced with frustrating, inconclusive tasks, this project was perceived as feasible. There were several reasons for this optimism. The support provided by the presidents made centralized computer processing possible and aided in standardization of the data elements. Duplication of the necessary computer programming at each school or hand tabulation would have been nearly impossible. Previous attempts for other statewide studies had usually been stymied, at least in part, by inconsistent and missing data. However, because of this presidential support, as well as the enthusiasm of study team members, the data flowed in smoothly.

3. Schedule

Another positive factor was the schedule. Because of the dates for the upcoming legislative session and the levy elections, the study completion date was fixed. Consequently, the project had an immediate imposed structure. Combined with the high priority given the project, the short time available (about 2½ months from the first meeting until study release) required that

decisions and compromises be made, and be made quickly. Had this not been the case, much of the energy and enthusiasm might have seeped away. Instead, progress was continuous and visible. The short time required that there be due dates for data submission and that the deadlines be met. With all material submitted together, most inconsistencies were quickly identified and clarified before they became problems.

4. Control and Coordination

There are two other factors which are related, both of which deal with command and control. First, for this study there was a strong project chairperson (statewide coordinator) and a coordinating point designated where face-to-face meetings were held, all instructions and correspondence prepared and sent, and all data processing done. With the tight schedule, this organization gave unity to a project which otherwise could have become chaotic. Second, an independent consultant was retained who provided a detached viewpoint of the process. The consultant could thus facilitate the process and also perform an auditing function. With broad, general background in institutional research and with the time to verify questionable points in economic impact methodology, the consultant greatly improved the quality of the study.

5. Team Selection

Finally, there was the factor of the study team itself. The college presidents designated persons skilled in institutional research techniques, knowledgeable of existing data, and able to define quickly the problem, propose and evaluate solutions, and to execute or to supervise directly the execution of the planned action. Such a skilled and hardworking team was indispensable and an example of good delegation of authority.

B. HINDERING FACTORS

1. Lead Time

There were three major hindering factors encountered in conducting the study. One has already been alluded to--the short lead time available. While the short time did give structure and immediacy to the task, it also created problems. As an example, if more lead time had been available, some of the data needed could have been derived from routine, rather than special, student questionnaires or taken on-line from computerized year-end financial data. Instead, ad hoc methods were necessary because this study was out of phase with other studies and reporting systems. There was also some inconsistency in the years for which different data were derived. For example, institutional expenditures were for the 1980-81 fiscal year, student expenditures were for Fall 1981, and student head counts were for Winter 1982. Due to the specific measures and techniques used in the study, however, the consequences of such inconsistencies were judged to be inconsequential. Further, the rapid pace of the process prevented extensive pilot testing of questionnaires and other procedures. As a result, there were some "surprises" at the data processing end which required exceptional effort to correct. More lead time would have eliminated or at least reduced the extent of these problems.

2. Study Topic and Scope

The other "hindering" factor was the nature of the study itself. The concept of "economic impact" is quite broad, and the term evokes quite different responses in different people. Because of the breadth of the topic, the short time available, and limited resources, this study adopted

a very restricted measure of economic impact. Consequently, the study runs the risk of being misinterpreted, or having its validity questioned and its importance doubted by some. The Oregon study team felt that although the Caffrey and Isaacs model is valid and useful, its rather restricted scope may be a liability. Additionally, the concept of the multiplier is not intuitively obvious, and it is difficult to "prove" the validity of any particular multiplier without resorting to rather esoteric economic theory and to extensive and sophisticated statistical survey techniques. Hence, only general rules of thumb are available for use, with the result that they may easily be questioned by opponents and are not easily explained or justified.

The topic also created some operational problems for the study team, which did not include any "resident expert" economist. There was no expert to present the theoretical justification of the method to any doubters or to resolve disputes about specific parts of the Caffrey-Isaacs model.

Finally, and of central importance, there was the choice of multiplier. It was for this crucial decision that the lack of an expert was most keenly felt. Fortunately, the consultant was able to devote time to this key point of the study and to provide a defendable figure. Many outside sources were contacted, including several economists and studies conducted by other community colleges (see Appendix 1).

Lastly, and as already mentioned, the Caffrey and Isaacs model is a fairly specific measure of economic impact. Although it is theoretically sound and has been widely used in describing the impact of colleges, it is most appropriate for use by traditional residential colleges with a large percentage of out-of-area students. It is under these conditions that the

model is most easily explained and where the impact measured is relatively strong. Under these circumstances, the institution can be thought of as a basic industry, bringing new money into the community in addition to recirculating existing money. It is this very point which is often used in justifying a school to a small town.

In contrast, the philosophy and mission of the community college usually places less emphasis on the direct economic impact of the college. Instead it stresses service to students. The Caffrey and Isaacs model ignores the increased earnings of students or the increased productivity of businesses, etc., which might be the measures of economic impact relevant to the community college philosophy. However, in their defense, Caffrey and Isaacs do discuss this dilemma and pointed out the extreme difficulty of obtaining such data. Their model, consequently, uses data which is relatively easily obtainable from existing college records and simple questionnaires.

C. OTHER CONSIDERATIONS

Requests for information on the impacts of educational institutions will undoubtedly continue in the future. As the society becomes better educated and as information becomes more available, demands for institutional accountability will probably increase. There are, then, several implications and options for future studies on community college economic impact.

1. Involve State Level Individuals

For future studies we recommend more initial clarification of just what is meant by "economic impact" and more careful determination of how the information will be used. To accomplish this, there should be considerable involvement of the ultimate users of the information in the planning process.

Such involvement would probably be most profitable if done in the early, problem definition phase of the project. The involvement of state level users could also expedite access to some data and resources. These individuals should also probably take a more active part in designing the final report of findings, to maximize its usefulness in meeting their information needs.

Examples of persons or organizations in Oregon who should be fully represented in the planning process for any future studies are: the Oregon Community College Association (OCCA); legislative staff, to include at least representatives of Senate and House education committees and those involved with legislative research; public information officers from the colleges; State Department of Education (SDE); State Department of Economic Development, Research and Agency Liaison Division; and the Educational Coordinating Commission. Because of the midly partisan nature of the project, and because it would be a non-mandated addition to their workloads, individuals from the agencies and organizations may be difficult to recruit. The effort, however, should be made.

2. Further Search/Review the Literature

Prior to involving statewide users, a broad literature search and review should be conducted on economic impact models and techniques, to include both theory and case studies. The purpose of the search would be identification and review of more recent studies, especially those designed specifically with community colleges in mind and designed for a broad spectrum of uses. The bibliography (see Appendix 1) identifies several community college studies with which we were not familiar when our project was initiated.

3. Revise General Model ("redistribution of existing dollars, not additional dollars in circulation . . . the economic impact is an accelerated rate of distribution")

Regardless of whether new or augmented models are adopted, any future studies using cash flow models should stress the impact of "redistribution of existing dollars" rather than the creation of "new or additional dollars." For most community colleges, the "economic impact due to accelerated rate of distribution" of existing money is more relevant to their mission and rule and is a more accurate description of fact.

4. Explore Other Measures of Economic Impact

Also, additional measures of impact should be explored. The Caffrey and Isaccs model has several cash flow measures and economic growth indicators which were not measured in this project due to limitations in time and restrictions of the charge. However, if used, they would give a more complete and balanced picture of cash flow impact. And as mentioned, measures of the economic results of student learning outcomes would be of great interest, even if difficult to determine and report with certainty.

5. Further Study Multipliers

More recent work which has strong theoretical justification should be identified to justify the choice of the multiplier. At best, the Caffrey and Isaacs study provides only role of thumb guidelines. And, these were for quite different student populations 10 to 15 years ago and primarily for use by institution-types other than community colleges. More local studies are needed to derive "best estimates" of economic multipliers for use by the local institutions.

6. Hire an Independent Consultant

Regardless of how future studies are designed or conducted, the use of an independent party for certain study functions is strongly encouraged. We do not believe the entire study can best be done by a third party because of the need for people with access to and familiarity with institutional records and procedures. However, the detachment and broader perspective of the consultant is highly valuable. The consultant can assist in group process. That is, the consultant can raise questions, clarify procedural issues and summarize solutions proposed during the planning and research design phases. During the data collection and data processing phases, the consultant should audit the process. Overall the consultant should expedite the work, help the statewide coordinator resolve issues, and assist with report preparation. And, finally, the consultant can add credibility to study results. As an example, a copy of a consultant's report, included as part of the Oregon Community College Study, is attached as Appendix 5.

PART III: METHODOLOGY--WHAT WE DID AND SOME RECOMMENDATIONS

We found that the steps in the initial planning phase were at least as important, and perhaps even more important to ultimate project success as the subsequent implementation steps. Our study would have benefited from more planning time, but our required time frame was too short. Most of the project was accomplished between December 4, 1981 and March 18, 1982.

Described in this section are the steps we followed, along with suggestions for improving future studies.

A. INITIAL PLANNING--ESSENTIAL INGREDIENTS

We recommend the following series of steps accompany the initial planning process. A time frame of about three months should be provided to complete these steps, the first month reserved for the statewide coordinator to prepare an initial study plan based on a review of the literature and discussions with an outside consultant.

1. Identify a Statewide Study Coordinator

In our case, Dr. Stevenson of Mt. Hood Community College served as the statewide study coordinator. His services and those of his staff were offered for the study effort by the president of Mt. Hood Community College.

At minimum, the role of the coordinator should include:

- assembling and distributing for review by campus study coordinators an initial plan for the study
- setting and distributing agendas for meetings
- chairing the meetings
- finalizing the time frame for completing each activity of the study

- clarifying the study procedures to ensure compatibility of results across colleges and resolving any problems with assistance from the outside consultant
- and, in general, keeping the process going.

2. Identify a Statewide Study Consultant

The importance of the services of an outside consultant has been described earlier. A primary role for the consultant is as arbitrator and "court of last resort" when disagreements about study procedures emerge. The consultant should have no vested interest in the outcomes of the study, locally or statewide. And, the consultant should provide technical assistance with research design, the sampling procedures to be used, and the various special issues associated with calculating economic impact. The consultant is also responsible for auditing preliminary and trial plans for and results of the study.

It may be difficult to find one person with expertise in all of these areas. In our case, the outside consultant had limited expertise with economic impact study methodology, but the lack of this expertise proved not to be a liability. This field is replete with disagreements among the "experts" about "proper" or "most accurate" ways of calculating impact (e.g., what formula to use, how to derive the figures needed in the formula, what multiplier to use). Fortunately, ample materials are available which describe several available methodologies developed by economists. The consultant was able to review this literature and prepare recommendations.

3. Conduct an Extensive Literature Search

Appendix 1 provides a bibliography of studies we recommend be reviewed before an economic impact study is undertaken. Alternative methodologies

are available, some considerably simpler to implement than others. A key issue which will be encountered in any study will be that of selecting economic multipliers. The literature review can help with selection of the multipliers most appropriate to the nature of the study undertaken.

4. Draft an Initial Statewide Study Plan

The statewide study coordinator, with assistance from the consultant, should develop a draft plan for distribution to and review by campus study coordinators prior to the first meeting of the statewide consortium. This draft plan should contain the following:

- a statement of the basic purpose(s) of the study;
- a list of study assumptions and parameters, including the base years for which impact will be calculated, and the definition of "economic impact" to be used;
- the economic multipliers for use in calculating total dollar impact;
- the survey instruments recommended for use with collecting expenditure information from students and staff;
- a time schedule for all major study activities, including deadlines;
- a data transmittal form with instructions of the steps to be followed in calculating economic impact and each piece of data needed; the form shows how each piece of information is to be derived and how each is combined with others to produce the final numbers (see Appendix 2 for the form used by the Oregon colleges); and
- excerpts from other studies which provide the local coordinators with background information about economic impact study methodology.

5. Identify Study Coordinators for Each College and Form the Study Consortium

The presidents of each college should appoint the campus study coordinators. In most cases, these individuals should hold positions related to campus planning and institutional research. In our case, several coordinators had conducted economic impact studies and several had considerable expertise with research

design and data analysis.

Campus study coordinators should represent their campus at the statewide meetings of the consortium; appoint a campuswide study committee, with representation from students, faculty and staff; with their local committee, prepare the local study plan; coordinate the local data collection effort; and review and correct, if necessary, the local data before sending it on for central data processing.

Not surprisingly, the caliber of leadership of the campus coordinators has a direct relationship to the quality of the local effort. In the Oregon case, most presidents were very supportive of the study effort and appointed highly qualified and motivated individuals to direct the local study. Sufficient authority was given to the coordinators to accomplish the required tasks.

6. Review and Revise the Draft Study Plan with Consortium Members

Allow at minimum one full day (1½ days would be preferable) for an initial meeting of the consortium. The agenda should include the following items for discussion:

- purpose(s) of the study--the local campus president might speak to this topic (which he did in the Oregon case);
- key study assumptions and a description of the economic model proposed for use--statewide coordinator
- local study procedures--statewide coordinator
- data collection and verification procedures, including the survey instruments and data collection reporting forms--outside consultant
- data processing and reporting--statewide coordinator

In hindsight, our study could have benefited from a more extended discussion of data collection and verification procedures, particularly regarding the collection of college expenditure data and the reviewing of completed survey

instruments.

It is critical at this first meeting, or even prior to the meeting, to assign responsibility for data processing, data analysis and reporting. We recommend these tasks be undertaken centrally and by someone who can maintain close communication with the statewide study coordinator.

7. Form Local Campus Study Groups and Develop Preliminary Campus Plans

We recommend the local committee include student, faculty and staff representation. We insisted on this representative committee model. The study procedures will require the full cooperation of these campus constituencies for study success. Also, the college public information officer should be on the committee.

The preliminary campus plans should contain the following:

- a membership list of the local coordinating committee and the role of each member as well as the committee as a whole;
- a plan for informing students/faculty/staff about the purpose of the study and its importance;
- copies of all questionnaires proposed for use in collecting student and staff data, if survey techniques are to be used;
- a description of the proposed sampling procedures for collecting survey information from students and rationales for the procedures selected (why they will result in representative data);
- a description of the proposed sampling procedures for collecting survey information from faculty and staff and rationales for the procedures selected;
- a description of the proposed student and staff survey administrative procedures including: time schedule, personnel to be involved, briefing sessions for distributing and collecting the data, data collection procedures and followup;
- solicitation of alternative economic multipliers to those used in the Isaac-Caffrey study, for use in deriving the local economic impact figures and the rationale for using these alternatives;

- a description of the exact sources for each piece of institutional data requested on the data transmittal form and any forms or worksheets used to derive local data; in particular, the description should include:
  - name/title of the person responsible for collecting each data item
  - the exact source of each piece of information
  - the procedures proposed to derive the college expenditure data (e.g., how much is spent in-district, in-state, out-of-state)
  - the formula used to derive FTE faculty/staff.

Early-on, campus coordinators should receive a checklist of what to include in their campus plan. The study consultant should work with the statewide coordinator to develop this checklist. The checklist should be made available to and reviewed with the campus coordinators at the first consortium meeting.

8. Review All Preliminary Campus Plans and Finalize Study Parameters and Common Procedures

The preliminary campus plan should be reviewed by both the statewide study coordinator and the consultant. The major issue accompanying this step is compatibility of the procedures proposed by the individual campuses. While the unique situations of each college must be acknowledged and individual initiative encouraged, the consultant must decide when a deviation from general procedures may result in incompatible data.

In hindsight, we recommend identical survey instruments (items and format) be used by all colleges. The colleges, however, should be permitted to include additional items on their local surveys, unless survey length becomes a problem. We did allow some select deviations from a common form to accommodate special circumstances at several of the consortium colleges. Problems, however, were then encountered in data coding and processing due to incompatible item formats and item order.

The consultant should provide campus coordinators with feedback on

their plans, indicating where the plans need to be strengthened, expanded, and/or clarified. General issues which surface during this initial development phase should be discussed at a second meeting of the consortium, perhaps one month or so after the initial meeting. Such a schedule provides time for the campus coordinators to form their local committees, develop preliminary study plans, and identify problems or issues which should be addressed by the consortium as a whole.

The Oregon group was on too short a time frame to hold this second meeting. As a result, the study coordinator and consultant spent many hours dealing with issues on an isolated, piecemeal basis. And, in some cases, problems and solutions to these problems occurred which were neither consistently nor quickly enough communicated to all participating colleges. Some inconsistencies in study procedures resulted.

9. Sign-Off of Final Campus Plans by the Consultant

Final plans should be submitted in writing to the consultant. Data collection of any kind should proceed only when final approval of the plan is given by the consultant. Standardized student and faculty/staff survey forms should be developed and approved early on, though, so that adequate time is allowed for duplicating and preparing the forms for distribution.

Some of the more technical problems we encountered and which should be anticipated are described below.

a. Vendor records: Methods used to derive estimates and records of "in-district" and "in-state" college expenditures are maintained differently at the various campuses. Vendor addresses don't always indicate the "correct" final destination of the dollars (e.g., payment made out-of-state for rental of a car from a local vendor should be

counted as an "in-district" expenditure);

b. Source of "in-district" expenditure estimates: Estimates of the "in-district" versus "in-state" expenditure percentages can be derived from examining several sample months or from use of total records. If a sample is used, it is important to note that some months are more or less representative of "typical" expenditure patterns for the year. Care must be taken in sample month selection;

c. Potential double counting of expenditures: The potential for double-counting some expenditures exists. For instance, expenditures for books/supplies, usually largely from the campus bookstore, were accounted for in the student survey but initially expenditures were also shown by the bookstore through campus accounts. We excluded the bookstore and food service operations from the college expenditure figures;

d. Calculation of a "full-time" staff or faculty member; not all colleges derive "FTE" the same way;

e. Calculation of a "full-time" student; again, derivation of "FTE" varies across campuses;

f. Survey administration: Too little attention was given to how the survey would be presented to students by those assisting with survey distribution. It is critical that all students surveyed receive the same oral and written instructions about completing the survey and the meaning of the various survey items. We did not use <u>standardized instructions</u> but <u>strongly recommend</u> them. Because we did not standardize instructions, not all students may have interpreted all survey items the same way (e.g., "estimate your expenses in each category

BECAUSE you are attending X college" . . . which means, don't include expenses you'd still have if you were not a student); and

g. Definition of "total disposable income"; initially, we did not define clearly what is meant by the "total disposable income" of faculty and staff. The definition used was "total income minus required deductions, such as FICA, Income Tax and PERS (Public Employes Retirement System)." Still, not all colleges calculated this the same way. More lead time for planning and discussion of data elements should help to eliminate this problem.

B. DATA COLLECTION

Data from three sources were needed for the Oregon study: students, faculty and staff, and college records. Survey instruments (see Appendix 3) were developed to collect the information needed from students, faculty and staff while data transmittal forms were used to help define and organize the college records information needed.

1. The Preparation Phase

Prior to the administration of the survey instruments, most colleges used several strategies to increase campus awareness of and commitment to the study process. Representatives from the local study group met with all key committees, councils or other forums, including the student Senate and the faculty council. Notices and articles appeared in student and staff bulletins and newspapers. In some cases, early press releases about the study were distributed. Particularly important is the recruitment of key individuals from student, faculty, and staff organizations to serve on the local campus study group.

2. The Student Survey

We believe the following procedures and standards related to the content and administration of the student survey will ensure success with the collection of data from students.

a. Selection of a random sample of course sections stratified by course reimbursement categories (e.g., lower-division transfer, vo-tech., etc.), including non-reimbursable courses and some sampling of courses taught at "off-campus" sites. Most colleges were able to select samples directly from a computer or from course enrollment information available from computer printouts.

b. Achievement of a sample of 10% of the total population of course sections or a minimum of 500 student responses. In all cases, we achieved this objective.

c. Use of a standardized survey form, with exceptions allowed by the study consultant only if they were judged not to result in incompatible data. In hindsight, and as mentioned already, we recommend the exact same form be used by all colleges. Even the few deviations we allowed created some problems for the data processing.

d. Use of a trained group of individuals to administer the survey in-person, in the classroom, to student respondents. Again, in hindsight, we recommend use of a standard set of written instructions by those administering the survey when they explain the survey items to students. We suspect the same procedures and script were not used in all classrooms at all the colleges. This may have resulted in different interpretations by students of several survey items, particularly item #3 (see Appendix 3) which asks them to "estimate . . . expenses

in each category BECAUSE you are attending X community college." Instructions should emphasize that expenditures students would have anyway if they were not students should be excluded from their response to the item; also, students should be reminded to complete the survey only once, even if they attended more than one of the sampled class sections;

e. Clarification of the housing expense item. Though called for on the form for the sake of completeness, housing expenditure information was not used in the final calculations of economic impact. This issue was debated extensively by study participants, and not all agreed with the final procedural decision made by the consultant. The consultant felt inclusion of housing costs would be very difficult to explain and justify to various external audiences. And, many if not most, individuals attending a community college, including the full-time students, would have housing costs in the community even if they were not students. (Analysis of another item on the student survey suggested that a large number of students would not move to another community to attend school if the local campus were not there. This post-hoc analysis in part justified the decision to exclude housing expenses from the study.);

f. Ensurance of a representative sample from the student survey. Several characteristics of the resulting student samples were compared with those of the total student population for representativeness. We found that two characteristics are particularly important to check: the full-time/part-time ratio and the in-district/out-of-district residency;

g. Review of completed surveys by local coordinators. Local groups

were to have reviewed the survey forms for completeness and reasonableness of responses. Written procedures, however, were not made available to them for use in the editing process. As a result, the quality of editing was uneven and more had to be done centrally; and

h. Survey administration. Surveys were administered during the same week, with follow-up activities occurring, if needed, the following week. Followup was required only if insufficient numbers and representativeness of responses were achieved.

Finally, a problem with our survey form should be noted. Item #4 (see Appendix 3) asks the student to estimate the percentage of "in-district" and "in-state" expenditures which are college-related. Responses would have been more accurate if response categories had been "in-district" and "out-of-state."

3. The Faculty-Staff Survey

Administration of the faculty-staff survey (see Appendix 3) was considerably easier than the student one. At each college, all full-time faculty and staff were asked to complete the instrument. Although several colleges included some part-timers in the population, in most instances, data on expenditures by the full-time group was extrapolated to part-timers when calculating the percentage of disposable income spent in-district and in-state. Response rates achieved in most cases were extremely high.

Many colleges distributed the surveys at faculty and staff meetings. Another frequent procedure was distribution through the campus mail with returns directed to department offices.

All colleges used a common survey form and the instrument was administered during the same week with follow-up the subsequent week.

4. Data from College Records

Our experience suggests this is the trickiest part of a study which involves more than one institution. Simply put, as institutions, we don't keep records the same way! Despite our use of Data Transmittal Forms (see Appendix 2) which described the data elements needed (e.g., number of full-time faculty, etc.), several significant problems were still encountered. Some of these problems were mentioned in the previous section on planning. Here are the most important problems to anticipate and solve in the initial planning stage:

a. Inclusion or exclusion of bookstore and food service college expenditures from total expenditures. This decision is necessary because most of these dollars are also included in data from the student survey (e.g., student expenditures for books and supplies). The same potential "double-counting" problem could occur for campuses which provide housing.

b. The technique used to allocate college expenditures as either "in-district" or "in-state." Some colleges used complete yearly data, while others derived estimates by examining three representative months. In this later case, care must be taken to select truly representative months. Also, some expenditures were very difficult to place discretely into "in-district," "in-state," and "out-of-state" categories. For example, in our case, total expenditures for FICA, unemployment insurance and the campus share of retirement system payments (for which the colleges have no "vendor list") were divided as follows; in-district--60%; in-state but out-of-district--30%; and out-of-state--10%. This allocation was based on estimates provided by the State Employment Division.

c. The definition and calculation of "disposable income" from faculty and staff salary data. Detailed, written instructions about what to include and exclude must be provided.

d. Inclusion or exclusion of capital expenditures or debt retirement dollars in total college expenditure figures. In the Oregon case, we excluded these expenditure categories.

C. DATA PROCESSING

Once the survey questionnaires and institutional forms had been completed, they were mailed or delivered to the central data processing site, Mt. Hood Community College. A centralized approach to data processing was the only viable option open to the consortium since few of the participating institutions had the computer hardware and softwar needed to complete the project within the designated timelines. An advantage to this approach is that standardized procedures can be followed for data entry, editing, verification, statistical analysis and reporting.

Data processing for the project employed a Prime 500 mini computer using the following four software products:

· INFO--an application generator used for creating the screens for data entry and verification, file management, and some of the processing and report writing. An application generator is strongly recommended since it allows for sophisticated data processing routines to be implemented in about 1/10th of the time required of conventional programming, using a language such as COBOL.

· SPSS (Statistical Package for the Social Sciences) a program of routines used for statistical analysis. It is assumed that most readers are

familiar with the capabilities of this widely used software.

· RUNOFF--Prime's word processing software used in preparation of the final report.

· EDITOR--Prime's editor used as the interface for the above software. That is, the data were stored in EDITOR files for access by the other software tools.

1. Data Preparation

Only limited "editing for reasonableness" was done at the central data processing site prior to data entry. Such editing was the responsibility of each college. Review of the materials submitted, however, revealed that such editing was not done on a uniform basis. Nonetheless, we still recommend that this decentralized review procedure be followed since central staff are ill-equipped to perform such editing, especially when there are tight timelines. The lack of written guidelines for this editing was a major factor in the limited editing job completed by the colleges. Such guidelines are highly recommended.

The major editing of the student and staff questionnaires involved the percentages given for expenditures "inside the college district" and "inside the state" (see Appendix 4, Question #4 on Student Questionnaire and #3 on Staff Questionnaire). That is, the questionnaires were checked to verify that the "inside the state" percentage included "inside the college district," with the remainder assumed to be out-of-state. Another major editing task involved the failure of some colleges to list the survey questions in the same sequence.

The institutional data forms were edited for reasonableness by the

Statewide Coordinator. However, many of the discrepancies with this data were not identified until the "comparative analysis" phase described below.

2. Data Entry and Verficiation

Separate files were maintained for each college and for each questionnaire. INFO-built screens were employed for data entry. Screen options used included preventing the entry of duplicate identification numbers and the checking of incorrect data format and value ranges for each question. This latter option reduced the occurrence of data entry errors (e.g., the entry of a "3" where the only valid values are "1" or "2").

A 10% random sample of the student and staff questionnaires was checked for accuracy of data entry. For most college's files a 0% error rate was found. The highest error rate found was 3%. Thus, it was concluded that data entry error was random.

Prior to analysis, a check was performed on each of the student's estimates of expenditures spent inside the college district. To perform this check, a maximum reasonable ratio of expenses was established. Then, each student's reported ratio was compared to this ratio, and changes were made as necessary. For example, the amount shown for tuition and books was divided by the total expenditure figure for college-related expenses. An INFO program was written to calculate this percentage and, if it was greater than the estimated maximum percentage, the value of "in-district" expenditures reported by the student was substituted. This procedure tended to validate the students' estimates since few questionnaires were modified.

3. Summary Statistics

Once entered and verified, the student and staff questionnaire data were

summarized using SPSS programs. Averages and frequency distributions were produced for each question. These summary statistics were reviewed by each college. The reports contained the average local and statewide student and staff expenditures needed in the final calculations of economic impact.

As noted in the final report, student expenditures for housing and tuition and fees were not used. Housing was excluded because it could not pass the test of "college related" expenditures. Student reported tuition and fees were excluded because they were already included in the college expenditure data.

Although this procedure did prevent housing and tuition expenditures from being double counted in the calculation of average student expenditures, it did not resolve another problem that was only discovered at this writing. That is, the tuition and housing costs were included when the student, or the editing routine described above, estimated the <u>percentage</u> of "in-district expenditures." This problem can be illustrated by the following hypothetical example. Suppose the student listed the following expenditures:

$100.00	housing	(100% in-district, 0% out-of-district)
100.00	transportation	(50% in-district, 50% out-of-district)
100.00	food	(50% in-district, 50% out-of-district)
100.00	other	(50% in-district, 50% out-of-district)
200.00	tuition	(100% in-district)
$600.00		

The student's evaluation of percent of in-district expenditures would be: ($450 ÷ 500) X 100, or 80%. However, according to the final study design, housing and tuition should not be included in the calculation since housing was an invalid expense and tuition was already included in college expenditures. The correct in-district percentage would equal ($150 ÷ 300) X 100, or 50%.

Thus, the inclusion of housing, and especially tuition expenditures, resulted in an over-estimation of the in-district percentage. This, in turn, introduced a systematic bias into the calculation of local economic impact. Because the Oregon study used a relatively conservative multiplier and used several other procedures the results of which were to render final figures conservative, we do not believe the impact of his error discredited the final figures we reported. Others, however, should certainly seek to eliminate this error.

4. Comparative Analysis for Reasonableness

A summary file was created to facilitate the calculation of economic impact both within each district and statewide. The summary file contained a record for each college and included: a) the institutional data; b) average expenditures and percentages spent in-district and in-state from the student and staff surveys and, c) the multipliers.

Prior to calculating economic impact, comparative figures for each college were generated and reviewed for reasonableness. For example, a table was created showing "percentage of expenditures spent in-district" and "in-state" by colleges and by their students and staff. In the case of "percent of college expenditures spent in-state," relatively similar figures across colleges were expected. When comparing "percent of in-district expenditures," however, we expected considerable variation since some colleges are located in rural areas and others in major urban centers. The only major problem identified through this comparative analysis was related to disposable income of college staff as a percent of gross salaries. We expected these percentages to be similar since the colleges employ relatively

uniform deductions. Since considerable variation was found, colleges which significantly deviated from the group average were asked to verify the figures submitted. This technique did identify several cases of procedural inconsistency, and revisions were made before final calculations were performed.

5. Impact Calculation

An INFO program was created which included the formulas developed by Caffrey and Isaacs for calculating economic impact. The resulting reports were reviewed by the colleges prior to preparation of the final statewide report.

6. Report Preparation

Computerized word processing was used, and we strongly recommend its use to others. Prime's word processing software (RUNOFF) enabled the final report to be finished within the specified timelines. This was especially crucial since all the colleges had to approve the document, and many revisions were made. Word processing capabilities were also especially helpful in creating the series of appendices describing the economic impact of each college. To do this, one master appendix was prepared with "spaces" left for the variables. This master could then be "edited" to insert a particular college's economic impact figures. An example of one of the college reports is included as Appendix 4. Tables 1-4 show the file variables and comparative data included in the final project report.

7. Summary

As mentioned earlier, the data processing part of this project would have been less painful if more time had been devoted to initial planning. This

TABLE 1

COMPONENTS OF STATEWIDE DIRECT IMPACT

College	In-state Student Spending	In-state Staff Spending	In-state College Spending	Total In-state Direct Impact
A	4,094,913	2,069,341	1,875,729	8,039,983
B	4,857,109	2,496,320	3,251,427	10,604,856
C	21,798,556	8,495,076	7,503,355	37,796,987
D	14,640,685	4,892,327	7,650,589	27,183,601
E	3,409,668	1,850,661	754,912	6,015,241
F	14,863,887	11,113,330	10,387,104	36,364,321
G	14,186,537	5,416,101	1,603,608	21,206,246
H	11,218,542	6,329,771	7,645,179	25,193,492
I	41,411,776	14,535,358	11,406,672	67,353,806
J	5,793,688	2,304,251	1,399,352	9,497,291
K	5,607,992	2,337,754	3,123,623	11,069,369
L	2,497,050	1,144,890	1,103,497	4,745,437
M	5,682,926	2,312,900	2,451,687	10,447,513
N	1,158,534	132,823	277,367	1,568,719
O	491,310	265,228	220,650	977,188
Totals	150,554,639	65,563,308	60,377,384	276,495,331

TABLE 2

IMPACT COMPARED TO TAX DOLLARS

College	State and Local Tax Revenues	Statewide Impact	Impact Per Tax Dollar
A	3,804,585	16,079,966	4.23
B	4,288,364	21,209,712	4.95
C	13,569,804	75,593,974	5.57
D	10,864,387	54,367,202	5.00
E	2,630,551	12,030,482	4.57
F	16,195,065	72,728,642	4.49
G	7,396,183	42,412,492	5.73
H	11,327,446	50,386,984	4.45
I	19,107,747	134,707,612	7.05
J	3,444,641	18,994,582	5.51
K	3,418,291	22,138,738	6.48
L	2,349,568	9,490,874	4.04
M	3,731,409	20,895,026	5.60
N	349,013	1,954,376	5.60
Totals	**102,477,054**	**552,990,662**	**5.40**

TABLE 3

JOBS DERIVED FROM COLLEGES

College	Students Who Would Not Attend College		Students Who Would Attend An Out-of-District Colleg	
	FT	PT	FT	PT
A	255	1,414	587	319
B	259	2,3918	793	714
C	997	1,277	1,991	769
D	475	1,805	1,337	2,472
E	174	1,377	256	414
F	1,002	7,210	1,516	1,236
G	604	4,719	1,184	864
H	444	1,786	2,686	3,231
I	1,822	5,918	2,673	4,289
J	331	1,458	421	721
K	341	2,089	507	539
L	127	969	503	315
M	331	2,203	683	554
N	23	1,049	19	236
O	23	799	17	269
Totals	7,208	36,421	15,173	16,942

TABLE 4

WINTER 1982 ENROLLMENT ALTERNATIVES

College	College FTE Jobs	College Related Indirect Jobs	Total FTE Jobs
A	182	836	1,018
B	223	1,188	1,411
C	787	4,065	4,852
D	520	2,373	2,893
E	190	633	823
F	884	4,118	5,002
G	551	2,386	2,937
H	644	2,446	3,090
I	1,951	7,306	9,257
J	118	1,010	1,128
K	160	1,254	1,414
L	144	525	669
M	268	1,102	1,370
N	35	100	135
Totals	6,657	29,342	35,999

project was completed on time primarily because of the availability of flexible software. Better planning and communication in the early stages also would have reduced the amount of error in college reporting. This, in turn, would have reduced the amount of recursive processing that became necessary. On the positive side, the data processing function did run smoothly given the time constraints under which the project operated. Again, the key was centralization and flexible software.

D. CONSORTIUM FINAL REVIEW

A second and final meeting of the consortium was convened in order to review the statistical results of the study and the proposed statewide technical report before its distribution. The comparative analysis for reasonableness and the report revision process were described in the preceding section.

Strategies for distributing the results were also discussed at length at this final meeting. The following distribution strategies are recommended by the study group:

1. release of statewide results before release of college results;
2. coordination of the release of statewide results by a statewide group. In our case, this role was assumed by the Oregon Community College Association (OCCA) and its Executive Director, Dr. Roger Bassett. OCCA organized a TV press conference which was attended by and reported in several Oregon newspapers. The press clipping is in Appendix 6. The OCCA is working on a concise report of study highlights to distribute to appropriate groups in the state; and
3. distribution by each community college of its own report of local and statewide impact. The colleges used a variety of distribution strategies which are described in the section to follow.

PART IV: WAS IT WORTH IT?

To address the question of whether the study was worth the effort, we describe in this section a sample of distribution strategies used and discuss what we believe was achieved, at least in the short-run.

A. DISTRIBUTION STRATEGIES

Common elements within the distribution strategies for most of the community colleges were the following:

- distribute to newspapers and TV via a press release
- distribute to all inhouse staff and appropriate "friends of the college"
- integrate results into speeches, other news releases or special letters, and conversations; and
- issue as reports to each college's BOARD of EDUCATION

While similarities in distribution were great, differences were numerous. Appendix 6 provides several examples of format, style and tone of the information released by different colleges or the articles appearing in the local papers, including:

- Portland Community College's "Newsletter" highlighting "An Investment that Pays Big Dividends";
- Linn Benton Community College's "Report to Taxpayers" explaining tax base and impact of the college;
- Treaty Oak's "Report to the Stockholders" describing study results;
- Mt. Hood Community College's Portland Oregonian and Journal Newspaper press clippings which "defend the community college's existence";
- Lane Community College's Cottage Grove Sentinel newspaper clipping stating that "LCC Pays Its Way";
- Treasure Valley Community College's Ontario Daily Argus Observer newspaper clipping stating that "TVCC's economic impact quadruples local tax levy";

- Umpqua Community College's newspaper clipping indicating that community colleges help boost economy;
- Blue Mountain Community College's "Report to the Stockholders" and newspaper clipping headlined, "BMCC Pumps Millions Into County Economies"; and
- Chemeketa Community College's newspaper clipping saying "Community Colleges say they are worth millions to economy."

B. ACHIEVEMENTS

Thus far, we believe the study has provided or achieved several things, some directly related to its original purpose and some only indirectly related.

1. Study results had immediate use, both publically and privately, to support and defend the community colleges. The study results are, hopefully, part of the appropriate base needed for garnering future support for community college funding;

2. A case study, along with recommended study procedures has been established for use by other colleges; and

3. A model of cooperation has been established. This project has demonstrated the capability of Oregon Community Colleges to work together--to define a subject and study it using common procedures.

Our hope is that in the longer run, the study will result in <u>better understanding</u> and <u>increased support</u> for all Oregon community colleges. In the meantime, we asked some individuals to address the question "WAS IT WORTH IT?" Here are several responses:

> I delayed responding to your memo because not enough time had lapsed to judge the value of the various steps to receive feedback. I can now respond. Definitely! And the President is in agreement. There has been positive verbal response from the letter that went to the business people. The Chamber of Commerce Governmental Affairs committee endorsed our tax base election with a vote of 14 in favor, 1 against, and 1 undecided.
>
> A favorable editorial appeared in the paper prior to the election using some of the information provided by the study. (copy attached)

The study provides valuable information to all staff. It adds one more dimension to our reason for being that we were not aware of. I believe it may be our foot in the door with other agencies involved in economic development who have never thought of us as being a partner in economic development.

We did pass our tax base election on Monday, 52% in favor, 42% against, 6% undervote and there is little doubt that the study data helped us do the job.

and

I believe that question can best be answered after the next legislative session and/or trip to the local voters for funds.

Appendix 1

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2. An Estimate of the Economic Impacts of Thomas Nelson Community College (Hampden, Virginia).

3. Westmoreland County Community College's Socioeconomic Impact on Westmoreland County (Youngwood, Pennsylvania).

4. The Economic Impact of Mercer County on the Local Community. Mercer County Community College, Trenton, New Jersey.

5. A Study of the Economic Impact of Six Community Colleges in Illinois. Illinois Community College Board.

6. The Impact of Community Colleges on Michigan and Its Economy (Delta Community College).

7. Economic Impacts of Maryland Community Colleges (Maryland State Board for Community Colleges).

8. The Economic Impact of the College on the Local Community During Fiscal Year 1978-79 (Bucks County Community College, Pennsylvania).

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STATEWIDE

ECONOMIC IMPACT STUDY

DATA TRANSMITTAL FORM

College _____ Study Coordinator _____

FOR: BUSINESS OFFICE

(A) LOCAL MULTIPLIER ONE = 0.15 from CAFFREY-ISACCS-or- LOCALLY-JUSTIFIED COEFFICIENT REPRESENTING THE EXTENT BUSINESSES PURCHASE FROM LOCAL SOURCES (0.____)

(B) LOCAL MULTIPLIER TWO = 0.60 from CAFFRFY-ISAACS-or- LOCALLY-JUSTIFIED COEFFICIENT REPRESENTING THE EXTENT INDIVIDUALS SPEND AND RESPEND THEIR INCOMES LOCALLY (0.____)

(C) PERCENTAGE OF TOTAL COLLEGE EXPENDITURES SPENT LOCALLY = (0.____) ...SOURCE---an estimation of percent spent in-district from a sample of three different month's expenditures.

(D) PERCENTAGE OF TOTAL COLLEGE EXPENDITURES SPENT IN-STATE = (0.____) ...similar SOURCE to (6) above. This is for STATEWIDE IMPACT.

(E) TOTAL COLLEGE EXPENDITURES = ($_____) ...SOURCE---the END OF FISCAL YEAR AUDIT. (include CAPITAL AND GENERAL FUNDS)

(F) GROSS SALARIES PAID TO STAFF = ($_____) ...SOURCE---BUSINESS RECORDS describing SALARIES of all college personnel (do not include employer-paid fringes).

(G) DISPOSABLE INCOME OF ALL STAFF = ($_____) ...SOURCE---BUSINESS RECORDS for money paid to staff not including DEDUCTIONS for TAXES and RETIREMENT.

STATEWIDE

ECONOMIC IMPACT STUDY

DATA TRANSMITTAL FORM

College _____ Study Coordinator _____

- -

FOR: PERSONNEL OFFICE

(A) NUMBER
COLLEGE STAFF = (_____) ...SOURCE---College records for Fall 1980. Report the number of FTE.

Person providing data: _____

Source (please provide details for each data item:

(A) _____

BUSINESS OFFICE - Transmittal Form continued

(H) STATE TAX REVENUES = ($ _____) ... SOURCE---Operational Revenues From State Appropriations For 1980-81

(I) LOCAL PROPERTY TAX REVENUES = ($_____) ... SOURCE---Operational Revenues From Local Property Taxes For 1980-81.

(J) COEFFICIENT FOR FULL-TIME JOBS PER DOLLAR OF DIRECT LOCAL EXPENDITURE = 0.00007 from CAFFREY-ISACCS-or-COEFFICIENT (_____)

Person providing data: _____

Source (please provide details for each data item):

(A) _____

(B) _____

(C) _____

(D) _____

(E) _____

(F) _____

(G) _____

(H) _____

(I) _____

(J) _____

Attach memos, etc., which provide further description of data sources and compilation procedures.

STATEWIDE

ECONOMIC IMPACT STUDY

DATA TRANSMITTAL FORM

_____ _____

College Study Coordinator

FOR: REGISTRAR'S -or- INSTITUTIONAL RESEARCH OFFICE

(A) FALL 1980 FULL-TIME STUDENTS = (_____) ...SOURCE---COLLEGE RECORDS for Fall 2980, 4th WEEK enrollment (headcount for students taking 12 or more credits).

(B) FALL 1980 PART-TIME STUDENTS = (_____) ...SOURCE---COLLEGE RECORDS for Fall 1980, 4th WEEK enrollments (headcount for students taking 11 or fewer credits).

(C) ANNUAL UNDUPLICATED HEADCOUNT = (_____) ...SOURCE---OCC-SIS Student Master count for 1980-81

(D) WINTER 1982 FULL-TIME STUDENTS = (_____) ...SOURCE---COLLEGE RECORDS, 4th week

(E) WINTER 1982 PART-TIME STUDENTS = (_____) ...SOURCE---COLLEGE RECORDS, 4th week

(F) WINTER 1982 COURSE SECTIONS = (_____) ...SOURCE---COLLEGE RECORDS

Person providing data; _____

Source (please provide details for each data item):

(A) _____

(B) _____

(C) _____

(D) _____

(E) _____

(F) _____

STATEWIDE

ECONOMIC IMPACT STUDY

DATA PROCESSING FORMULAS

Please provide a copy of this to all individuals providing data for our study.

In order to understand how the requested data will be used, the following formulas are provided:

(1) LOCAL ECONOMIC IMPACT = DIRECT ECONOMIC IMPACT + INDIRECT ECONOMIC IMPACT = COLLEGE-RELATED LOCAL EXPENDITURES

(2) DIRECT ECONOMIC IMPACT = LOCAL EXPENDITURES BY COLLEGE + LOCAL EXPENDITURES BY STAFF + LOCAL EXPENDITURES BY STUDENTS

(3) INDIRECT ECONOMIC IMPACT = PURCHASES FROM LOCAL SOURCES BY LOCAL BUSINESSES IN SUPPORT OF THEIR COLLEGE-RELATED BUSINESS + LOCAL BUSINESS VOLUME STIMULATED BY DIRECT ECONOMIC IMPACT (Local Recirculation of expenditures)

= LOCAL MULTIPLIER ONE X DIRECT ECONOMIC IMPACT + LOCAL MULTIPLIER TWO X DIRECT ECONOMIC IMPACT

(4) LOCAL EXPENDITURES BY COLLEGE = PERCENTAGE OF TOTAL COLLEGE EXPENDITURES SPENT LOCALLY X (TOTAL COLLEGE EXPENDITURES - GROSS SALARIES PAID TO STAFF)

(5) LOCAL EXPENDITURES BY STAFF = LOCAL EXPENDITURES BY IN-DISTRICT STAFF + LOCAL EXPENDITURES BY OUT-OF-DISTRICT STAFF

(6) LOCAL EXPENDITURES BY IN-DISTRICT STAFF = DISPOSABLE INCOME OF ALL STAFF X PERCENTAGE OF STAFF IN-DISTRICT X PERCENTAGE IN-DISTRICT STAFF SPEND IN-DISTRICT

(7) LOCAL EXPENDITURES BY OUT-OF-DISTRICT STAFF = DISPOSABLE INCOME OF ALL STAFF X PERCENTAGE OF STAFF OUT-OF-DISTRICT X PERCENTAGE OUT-OF-DISTRICT STAFF SPEND IN-DISTRICT

(8)	LOCAL EXPENDITURES BY STUDENTS	=	NUMBER FULL-TIME STUDENTS	X	AVERAGE EXPENDITURES FULL-TIME STUDENTS	X	PERCENTAGE FULL-TIME STUDENTS SPEND IN-DISTRICT	
		+	NUMBER PART-TIME STUDENTS	X	AVERAGE EXPENDITURES PART-TIME STUDENTS	X	PERCENTAGE PART-TIME STUDENTS SPEND IN-DISTRICT	
(9)	STATEWIDE DIRECT ECONOMIC IMPACT	=	STATEWIDE EXPENDITURES BY COLLEGE	+	STATEWIDE EXPENDITURES BY STAFF	+	STATEWIDE EXPENDITURES BY STUDENTS	
(10)	STATEWIDE INDIRECT ECONOMIC IMPACT	=	STATEWIDE MULTIPLIER ONE	X	STATEWIDE DIRECT ECONOMIC IMPACT			
(11)	STATEWIDE ECONOMIC IMPACT (for one college)	=	STATEWIDE DIRECT ECONOMIC IMPACT	+	STATEWIDE INDIRECT ECONOMIC IMPACT			
(12)	TOTAL STATEWIDE ECONOMIC IMPACT (all community colleges)	=	sum of	STATEWIDE ECONOMIC IMPACE	for each college			
(13)	LOCAL JOBS DUE TO COLLEGE PRESENCE	=	NUMBER COLLEGE STAFF	+	COEFFICIENT FOR FULL-TIME JOBS PER DOLLAR OF DIRECT LOCAL EXPENDITURES	X	LOCAL ECONOMIC IMPACT	

Appendix 3

College Name
ECONOMIC IMPACT STUDY
STUDENT QUESTIONNAIRE

Your responses to the following questions will help describe the economic impact of _____Community College on its district and on the state of Oregon. Your answers will be combined with others to be used only for statistical purposes; your individual responses will be kept completely confidential. If you do not know the exact answer to a specific question, please give your best estimate.

Thank you for your help.

(signed by College President and/or Board Chair)

NOTE: If you have completed this questionnaire in another class, please do NOT complete this one. Thank you.

1. Do you live within _____Community College district boundaries?
(see map on other side)

_____ Yes _____ No

2. Are you enrolled at _____ Community college for ...
(check only ONE response)

_____ 12 or more credits this term?
_____ 11 or less credits this term?
_____ only non-credit courses?

3. Estimate your expenses in each category BECAUSE you are attending _____ Community College. (If none, use $ 0.00)

Per Month Expenses

$_____ Housing (rent or house payment, plus taxes, insurance and utilities)

$_____ Transportation (if car, include gas, maintenance and insurance)

$_____ Food

$_____ Other Expenses (such as child care, clothing, insurance, etc.)

Per Term Expenses

$_____ Tuition and Fees

$_____ Books and School Supplies

4. Estimate the percentage of the total of THE ABOVE expenditures spent:

_____% inside the college district _____% inside the state

5. If _____Community College was not here, I would:

_____ not attend college

_____ attend college outside _____ Community College's present district

Appendix 3

College Name
ECONOMIC IMPACT STUDY
STAFF QUESTIONNAIRE

Your responses to the following questions will help describe the economic impact of _____Community College on its district and on the state of Oregon. Your answers will be combined with others to be used only for statistical purposes; your individual responses will be kept completely confidential.

Thanks for your help.

(signed by College President and/or Board Chair)

---

1. Do you live within _____Community College district boundaries? (see map on other side)

   _____ Yes _____ No

2. What is your college status?

   _____Faculty

   _____Staff

   _____Administration

3. Estimate the percent of your total disposable income which is spent:

   A. Inside the college district _____%

   B. Inside the state _____%

Return to: (name and/or place)

Due Date _____

COMMUNITY COLLEGE X

I. EXECUTIVE SUMMARY

The economic impact of Community College is described by the following findings for the 1980-81 school year:

1. $16,079,966 were in circulation within the Oregon economy because of the existence of Community College. This Statewide Economic Impact is the sum of the following:

(A)	In-state student expenditures because of the college ...	$ 4,094,913
(B)	In-state staff expenditures because of the college ...	$ 2,069,341
(C)	In-state college expenditures ...	$ 1,875,729
(D)	Indirect expenditures due to respending in-state ...	$ 8,039,983
	TOTAL STATEWIDE ECONOMIC IMPACT ...	$ 16,079,966

2. Community College had an impact of $11,939,306 on its district's economy. This local district economic impact is the sum of the following:

(A)	In-district student expenditures because of the college ...	$ 3,845,520
(B)	In-district staff expenditures because of the college ...	$ 1,827,547
(C)	In-district college expenditures ...	$ 1,149,394
(D)	Indirect expenditures due to respending in-district ...	$ 5,116,845
	TOTAL DISTRICT ECONOMIC IMPACT	$ 11,939,306

3. While Oregonians invest over $3.8 million in Community College through state and local taxes, the college is directly responsible for returning four times this dollar amount (over $16 million) to circulate within the Oregon economy.

4. 1,017 full-time equivalent jobs for Oregonians existed because of Community College. 182 of these jobs were directly with the community college, while the rest were the result of money in circulation within the college district.

5. If Community College was not here, approximately 255 full-time and 1414 part-time students would not have attended college in Winter 1982, while 587 full-time and 319 part-time students would have attended an out-of-district college. This out-of-district college attendance would

have created a monetary hardship on the commuting or resident student, well as an unmeasured negative cash flow out of the college's district.

While it is stressed that community colleges must be justified on the ba of educational and social services provided at a reasonable cost, t study demonstrates the significant economic impact that Commun College has on its geographic district, as well as on the State of Oreg

This study is significant because all Oregon Community Colleges comple this study using consistent procedures thereby producing comparable resu for the same year. This is the first time all community colleges i state have participated cooperatively in this type of study. This stud procedures and results were monitored by a statewide study group, as w as by an independent consultant.

II. STUDY RESULTS

This study surveyed 501 students and 97 staff at Community Colle collected college financial, personnel, and enrollment information. following subsections describe the findings from each data source:

A. STUDENT SURVEY (FT=full-time, PT=part-time)

1) Number of Student Responses	... FT Students	381
	... PT Students	106
2) Percentage of Winter 1982 Students Responding		
	... FT Students	45.2%
	... PT Students	6.8%
	... Total	19.5%
3) Percentage of Student Respondents Living In-District --		93.8%
4) Student Plans if College Didn't Exist (% of Winter 1982 students):		
a) not attend college	... FT Students	30.3%
	... PT Students	81.6%
	... All Students	41.3%
b) attend college out-side district		
	... FT Students	69.7%
	... PT Students	18.4%
	... All Students	58.7%
c) attend college inside district		
	... FT Students	NA
	... PT Students	NA
	... All Students	NA

5) Average Annual College-Related Expenditures by FT Students -- $3659
6) Average Percentage Full-time Students Spent In-District -- 91.25%
7) Average Annual College-Related Expenditures by PT Students -- $697
8) Average Percentage Part-time Students Spent In-District -- 95.69%
9) Local Expenditures by Students $3,845,520
10) Average Percentage Full-time Students Spent In-State -- 98.18%
11) Average Percentage Part-time Students Spent In-State -- 99.25%
12) Statewide Expenditures by Students $4,094,913
13) Percentage of Winter 1982 Course Sections Surveyed -- 7.28%

C. STAFF SURVEY

1) Number of College Staff Responding 97
2) Percentage of Winter '82 Staff Responding 80.00%
3) Percentage Staff In-District 100.00%
4) Average Percentage In-District Staff Spent In-District 82.99%

5) Local Expenditures by In-District Staff $1,827,547

6) Percentage Staff Out-of-district 0.00%

7) Average Percentage Out-of-district Staff Spent In-District 0.00%
8) Local Expenditures by Out-of-district Staff $0
9) Local Expenditures by Staff $1,827,547
10) Average Percentage In-District Staff Spent In-State 93.97%
11) Statewide Expenditures by In-District Staff $2,069,341
12) Average Percentage Out-of-district Staff Spent In-State 0.00%
13) Statewide Expenditures by Out-of-district Staff $0
14) Statewide Expenditures by Staff $2,069,341

D. COLLEGE INFORMATION

(1) Number of College Staff (Fall '80) _____182
(2) Number of Full-Time Students (Fall '80) _____822
(3) Number of Part-time Students (Fall '80) _____1652
(4) Annual Unduplicated Headcount (1980-81) _____7889
(5) Total College Expenditures (1980-81) $_5,508,140
(6) Gross Salaries Paid to Staff (1980-81) $_2,959,594
(7) Disposable Income of All Staff (1980-81) $_2,202,350
(8) Percentage of Total College Expenditures Spent Locally _____45.10%
(9) Percentage of Total College Expenditures Spent In-State _____73.60%
(10) State Tax Revenues (1980-81) $_1,357,613
(11) Local Property Tax Revenues (1980-81) $_2,446,972
(12) Local Multiplier One _____0.15
(represents extent businesses purchase from local sources)
(13) Local Multiplier Two _____0.60
(represents extent individuals respend incomes locally)
(14) Job Coefficient _____.00007
(represents full-time jobs per dollar of local economic impact - 0.000070.)
(15) Statewide Multiplier _____1.00
(represents extent businesses and individuals respend in-state)
(16) Number of Full-time Students (Winter '82) _____842
(17) Number of Part-time Students (Winter '82) _____1733
(18) Number of Course Sections (Winter '82) _____508

Appendix 5

Kinnick & Associates

3405 SW Carolina Portland, Oregon 97201 (503) 246-8371

CONSULTANT REPORT

The Impact of Community Colleges on Oregon's
1980-81 Economy

My task as the outside technical consultant to this project was easier than expected due to the particularly high degree of cooperation achieved by the community colleges in planning and implementing study procedures. Throughout the study, college study coordinators offered numerous suggestions for procedural improvements. Most were adopted.

I reviewed and approved the initial overall study design as well as individual community college study plans and survey instruments to ensure information comparability and the technical appropriateness of proposed methodologies. All decisions on study procedures were made such that resulting figures would underestimate rather than overestimate economic impacts. A conservative bias, then, was intentionally adopted. Also, individual college plans which proposed to deviate in any way from the overall study design were carefully scrutinized and exceptions allowed only if they were clearly justifiable and did not endanger data comparability. And, except for one locale, high staff and student survey response rates were achieved.*

Data processing procedures used by staff at Mt. Hood Community College were examined. Notably, a careful data entry and edit process was used resulting in a very low and highly tolerable error rate. While final responsibility for data accuracy rests with each community college, institutional survey, expenditure, enrollment and staffing information was comparatively reviewed for reasonableness. The few problems identified were quickly corrected. On March 5, 1982, the study coordinators met to review the resulting data, and several additional corrections were made.

---

*The staff survey response rate for Tillamook Bay was low. Tillamook Bay figures, however, were not included in the statewide totals. For this year, Clatsop Community College had jurisdiction for the district.

A major issue in an economic impact study is use and selection of multipliers. An extensive effort was made to identify multipliers most applicable to this study. The multipliers selected are all highly conservative and most likely underestimate the true impact of Oregon community colleges on the local and statewide economy. Conservative multipliers were selected, however, to ensure maximum credibility of study findings. The impacts reported, then, should be interpreted as minimums...that is, the Oregon community colleges have at least as much impact as is reported and, most probably, have substantially more.

I am fully persuaded that the figures reported in the final study document represent reasonable and technically sound estimates of the magnitude of impact community colleges have on the Oregon economy at both local and statewide levels.

Submitted by:

Mary K. Kinnick

Mary K. Kinnick
Study Consultant and
Director, Kinnick & Associates

March 10, 1982

Portland Community College President John Anthony explains the importance of community colleges to Oregon's economy at a press conference at PCC's Sylvania Campus. Looking on (from left to right) are Bill Gregory, Clackamas Community College board member and president of the Oregon Community College Association; Roger Bassett, executive director of the OCCA; and Mike Stevenson, a Mt. Hood Community College administrator who coordinated the study.

Community Colleges Contribute Five Times Their Tax Support

PORTLAND — Oregon community colleges contribute more than five times what they collect through state and local taxes, according to results of a statewide study released by the Oregon Community College Association.

The study shows that state and local tax revenue of $102 million generated $553 million during 1980-81. It said that an equivalent of 6,857 full-time employees were on the community colleges' payroll and another 20,342 full-time equivalent jobs existed because of money in circulation because of the colleges.

"We continue to hear that we no longer can have institutions because of a drain on taxpayers' dollars," said John Anthony, president of Portland Community College and chairman of the Oregon Community College Presidents Council.

"It's not a drain but an investment," he said. "It's a direct investment back into the community through the recirculation of dollars."

The study was prepared under the direction of the research office at Mt. Hood Community College.

Here is what each college generated for each tax dollar which supported it: Blue Mountain $4.23, Central Oregon $4.95, Chemeketa $5.57, Clackamas $5.00, Clatsop $4.57, Lane $4.49, Linn-Benton $5.73, Mt. Hood $4.45, Portland $7.05, Rogue $5.51, Southwestern Oregon $6.48, Treasure Valley $4.04, Umpqua $5.60, and Treaty Oak Area Education District $5.60. The statewide total was $5.40.

Portland Community College

12000 S.W. 49th Avenue, Portland, Oregon 97219 (503)244-6111

newsletter newsletter newsletter

May 1982

SENIOR JOB CENTER OPENS ON CAMPUS

Senior Job Center found jobs for nearly 1800 applicants during 1981, 25 percent of whom were placed in permanent positions. This spring it moved from Portland City Hall to PCC's Careers Office on the Sylvania Campus where it plans to continue its good record.

Headed by Curt Markus, a former public relations executive, Senior Job Center is a contact agency for persons over age 50 seeking part-time, permanent part-time, full-time or flexible hour work. It maintains an active skills bank of approximately 800 people who are available for all types of skilled jobs.

"We don't repair televisions or place babysitters," says Markus, because of the potential problems inherent in those two areas. High on the list of services the center can provide are yard work, in-home relief care, office help and all types of household projects.

Though the center isn't part of PCC, Markus feels there will be some meshing of services with the Careers Department. "We're for the person over 50 whether or not that person is a student," he says. Markus feels the center compliments the college very well and has placed many of his applicants in classes at PCC to help them update work skills.

Employers, says Markus, are 50 percent older people who don't feel physically threatened by hiring someone their own age to come to their home to do a job. The other half are younger professional couples.

To contact Senior Job Center, call 244-6111, ext. 562 or 583.

PCC ANNOUNCES SCHOLARSHIP PROGRAM

A scholarship program that will provide a one-year full tuition grant to a high school student from each of the high schools in the Portland Community College district was approved by the college board of directors at its March 15 meeting.

High school scholarship committees will make the selection based on general criteria suggested by the college, according to President John H. Anthony.

The establishment of this type of scholarship helps create awareness about our college and provides an opportunity for some 35 students to attend the college as representatives of their various high schools, Anthony explained.

The scholarships will be awarded to graduating seniors who exhibit an interest in attending PCC.

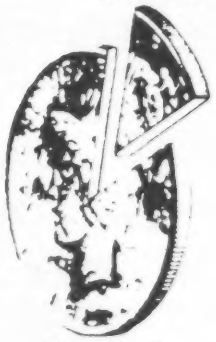
AN INVESTMENT THAT PAYS BIG DIVIDENDS

By Dr. John H. Anthony

In dollars and cents Portland Community College contributes back to the economy seven times what it collects through state and local taxes, according to a statewide survey completed for the community colleges in March.

The college receives $19.1 million through state and local taxes, but the college is directly responsible for generating over $134.7 million to the Oregon economy.

The unique study on statewide impact is the first done by any state which uses compatible research tools for a cooperative report. Statewide the 13 community colleges and the two area educational districts contributed five times the investment for a total of $553 million during 1980-81.



The presidents of the colleges stress the fact that the purpose of the community college is EDUCATIONAL and the educational and social impacts far exceed the significance of the economic impacts.

The fact remains that we are not a drain on Oregon's economy. During times of slumping business activities and rising unemployment, the community colleges are well suited to meet the special educational needs created by the depressed economy, changing technology and job displacement.

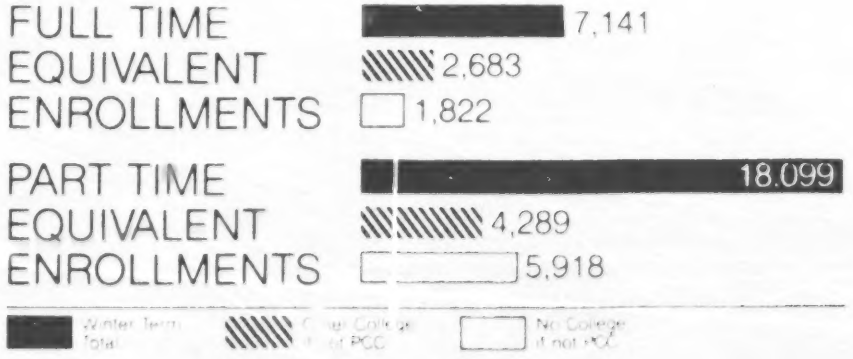
At the same time the very existence of the colleges means extra dollars circulating in the economy.

Heading the list of the colleges contributions to the economy would be jobs. Portland Community College employs 1,951 full time equivalent individuals in a variety of positions throughout the district and an additional 9,257 full time equivalent jobs for Oregonians exists because of the money in circulation within the college district.

The study also highlights the impact on the student population if PCC did not exist. Approximately 1,822 full time and 5,918 part time students would not have attended college at all during winter term 1981. Another 2,683 full time and 4,289 part time students would have been forced to attend a college outside this district, thus spending their dollars in some other area.

The economic impact started with simple objectives: to look at the money in circulation within the state that is traceable to the existence of the community colleges. Nationwide studies often explore much broader impacts. A 1979 study, for example, determined that community college students, on the average, will receive almost a 27 percent return on their investment in higher education during their lifetime.

Put simply, that means a college graduate will earn considerably more money than a high school graduate. Obviously, additional tax revenues generated from increased earnings increase the economic benefits for the community and the state. Any way you look at it, your community college is an investment that pays big dividends.



LBCC REPORTS

A REPORT TO TAXPAYERS OF THE COMMUNITY COLLEGE DISTRICT

MAY, 1982

PRESIDENT EXPLAINS TAX BASE

In the past ten years, between the 1970-71 and 1980-81 school years, enrollment has grown 313%, from 7,271 individuals to 30,000. This year we expect about 28,000 full- and part-time students enrolled in classes throughout the two-county area.

To help offset state funding cutbacks which gave us only a small dollar increase this year and a decrease of 9.1% next year, the college's board of education increased student tuition this spring by 7.1%, to generate about $40,000 in additional revenue this year. The board approved another 6.7% increase in tuition effective this summer, which will raise an extra $275,000 in revenue next year. A further increase may be considered for fall.

This year's drop in the number of students attending LBCC reflects a tightened policy on overenrolling classes or opening new class sections as other filled. We must take a responsible position in maintaining education's quality by avoiding the trap of trying to do too much with too little. It is unfortunate that when our community indicates its greatest need for our services in training for jobs because of an ailing economy, that same economy limits our ability to provide.

Another approach we've taken this year is a new budgeting system, calling for each program to justify all expenditures above 75% of last year's budget. Partially through that and other organizational efforts, we've already cut back in several areas, including two administrative positions, part-time faculty salaries in PE and Community Education, the equivalent of one faculty each in our counselling and developmental programs, a part of the emergency and repair funds, and supplies and equipment in our business affairs and maintenance operations.

No new programs are included in our budget for this year. The final $12,750,000 figure approved by the advisory budget committee and our board of education represents an 8.5% increase over last year's budget. It provides funds only for the same programs and numbers of students we've had this year.

The tax base request totals $6,151,939. Because we are unable to collect all taxes levied, that would provide about $5,413,706 in actual funds to operate the college's instructional programs. I want to emphasize that this money does not support student or community activities like athletics, performances or hobby and recreation courses.

The tax base would bring the tax rate to $1.62/$1,000 assessed property value from this year's $1.20. To the owner of the average $60,000 home, that would mean about $25.20 more a year. The tax base is eligible for the up-to-30% homeowner state tax relief program.

TREATY OAK EDUCATION CENTER
"OREGON'S FIRST AREA EDUCATION DISTRICT"
300 E. FOURTH STREET
THE DALLES, OREGON 97058
TELEPHONE (503) 296-5444

Report To The Stockholders

ECONOMIC IMPACT OF TREATY OAK

Based upon a recent Treaty Oak survey, completed in conjunction with a state study, the impact of Treaty Oak on Wasco County for the 1980-81 year was as follows:

*Local direct expenditures by students because they are attending classes.	$ 466,543
*Local direct expenditures by full-time and part-time faculty & staff.	202,303
*Local direct expenditures by the district for supplies & equipment.	148,601
*Total direct economic impact.	817,447
*Total indirect economic impact. For each $1 in state and local taxes a $5.60 return is realized, due to re-spending.	1,430,532
*Total number of jobs created in the community.	35 full-time equiv.
*Number of additional jobs indirectly created by Treaty Oak.	100 full-time equiv.

ADDITIONAL FACTS

*Treaty Oak provides significant community services;

*Generates long range economic impact through developing human resources - skilled employees and employers;

*Creates opportunities for adults and youth for quality academic education and new careers at a low cost;

*Keeps local students in our county. Of the students surveyed, 269 part-time and 17 full-time students said they would attend college outside the county if Treaty Oak was not here. This would be a significant drain on the community.

*Treaty Oak is a cost effective way to provide training and retraining plus other community college services to the community. The tax revenue per student is far less than any other community college district. The tax revenue per student at Treaty Oak is $93. The next lowest district in the state is $242. and tax revenue per student ranges as high as $656.

College financial impact measured

By JOYCE WYDRZYNSKI
Correspondent, The Oregonian

GRESHAM — Results of a statewide study measuring the impact of community colleges on Oregon's 1980-81 economy were released recently, and they show some favorable figures for the areas served by Mount Hood Community College.

The three-month study, which tabulated data collected from more than 50,000 participating students and employees from 15 Oregon community colleges during the 1980-81 school year, was instigated by Portland Community College President John Anthony and Mount Hood Community College President Stephen Nicholson.

For the 1980-81 school year, the study indicates that while Oregonians invested $11.3 million in Mount Hood Community College through state and local taxes, the college was responsible for returning $50,386,984 to circulate in Oregon's economy. This included $11,218,542 in in-state student expenditures, $6,329,771 in employee expenditures, $7,645,179 in college spending within Oregon and $25,193,492 in respent money in Oregon because of the community college's existence.

The study, which surveyed 594 Mount Hood Community College students and 331 college employees, also indicates that $34,943,856 was circulated in the East Multnomah and North Clackamas county areas alone in 1980-81 because of the college's existence. Broken down, this figure includes $10,085,770 in student spending, $4,311,022 in employee expenditures, $4,909,206 in college spending and $15,637,858 in respending expenditures inside the college district.

In other results, the study indicates that the equivalent of 3,090 full-time jobs existed for Oregonians last year as a result of Mount Hood Community College. The college personnel roster accounted for 644 of these positions.

4/15/82 OREGONIAN

Portland, OR
Oregon Journal
(Cir. D. 105,247)

MAR 2 6 1982

Allen's P. C. B 1-1 1982

Community college existence defended

By PETE McCONNELL
Journal Staff Writer

Oregon community college officials Thursday defended their existence in response to perceived criticism that they are causing a drain on taxpayers' dollars.

While Oregonians invest $102 million in state and local taxes annually in 13 community colleges, the institutions return $553 million to Oregon's economy through jobs created by the colleges and through "indirect jobs" in the community, said John Anthony, president of Portland Community College, and Bill Gregory, chairman of the Clackamas Community College Board of Education.

The information was gathered by a "study team" directed by the Mt. Hood Community College research office, Anthony said.

The study said that an equivalent of 6,657 full-time employees were on the community colleges' payroll and another 29,342 full-time equivalent jobs existed because of money in circulation because of the colleges.

Examples of college-related "indirect jobs" are grocery store employees, real estate people, gasoline station employees and public officials, the study said.

"While no one job may be directly attributable to college expenditures, parts of many jobs are combined into reported full-time equivalent jobs," the study said.

Anthony added, "We continue to hear that we no longer can have institutions because of a drain on taxpayers' dollars.

"It's not a drain but an investment," he said. "It's a direct investment back into the community through the recirculation of dollars."

Anthony, who also serves as chairman of the Oregon Community College Presidents' Council, said the equivalent of 60,000 full-time students attend community colleges in Oregon.

Last year the state allocated about $102 million for community college operations, Anthony said.

"Any time dollars get tight," Anthony said, "people begin to look at where the expenditures are. ... are a viable part of ... economy."

Cottage Grove, OR
Sentinel
(Cir. W. 5,820)

APR 7 1982

Allen's P C B F: 1888

College study says LCC pays its way

Lane Community College adds $72.7 million to the dollars in circulation in the county and state, according to an economic impact study done for the Oregon Community College Association (OCCA) in Salem.

Direct impact of LCC through salaries and student expenditures totals $36 million, the report indicates. An equal amount is in circulation through indirect efforts of spending and respending.

Statewide, the OCCA says community colleges add $550 million to the economy, which is five times the amount spent in state and local taxes to support the colleges.

The report was released Thursday by President John Anthony of Portland Community College, who chairs the OCCA President's Council. Compilation of data assembled by the individual colleges was done in the research office of Mt. Hood Community College at Gresham.

Spending by LCC students in-state brings $14.8 million to the economy, the report says. LCC staff spending adds $11 million, and the college spends an additional $10 million for supplies.

LCC generates the equivalent of 884 full-time jobs for employees, and another 4,118 jobs existed because of the money in circulation as a result of the college's existence, according to the report.

Without LCC, the report indicates, some 8,212 Lane County residents would not have attended college during winter term 1982. Some 2,752 students said that if LCC were not in existence, they would have left the area to attend college.

All 13 Oregon community colleges participated in the study, using consistent procedures to produce comparable results based primarily on the 1980-81 academic year. Dr. Mary Kinnick of Kinnick & Associates, Portland, audited the study.

Ontario, OR
Daily Argus Observer
(Cir. D. 7,570)

APR 16 1982

Allen's P C B Inc 1888

TVCC's economic impact quadruples local tax levy

751

ONTARIO — Treasure Valley Community College has an economic impact four times greater than the amount of money invested in the school.

That economic impact was revealed in a statewide survey and study conducted in February by Mt. Hood Community College.

The study disclosed that while TVCC received $2.3 million from local taxes and state support for the 1980-81 fiscal year, $9,490,874 was put into circulation in Oregon.

Surveying all Oregon community colleges, Mt. Hood's study itemized the expenditures according to student, staff and college spending. The TVCC figures show that students spent $2,497,050, staff spent $1,144,690 and the college spent $1,103,697 for a total of $4,745,437.

Mary K. Kinnick, director of Kinnick and Associates which served as consultant for the project, explained that the direct expenditures were calculated with a multiplier to determine the overall economic impact for the various colleges.

The final figure for TVCC, representing the money spent and respent (the reason the multiplier is applied) because the college exists, was $9,490,874 of which $7,505,137 was spent within the college district.

Kinnick emphasized in her report that multiplier selection was highly conservative resulting in the likelihood of underestimation of the true economic impact. "The impacts reported," she said, "should be interpreted as minimums."

The study shows that the average full-time student at TVCC spends $2,051 each year as the result of attending the college. Of the total expenditure, 88.47 percent is spent within the college district. An average annual spending rate for a part-time student is $551 with the in-district share at the higher 90.76 percentage.

The figures for student expenditures were based on their responses to a questionnaire regarding money spent as the result of attending college. Items such as books, supplies, tuition, food, transportation and housing costs were included. Money which the student might have spent if not attending TVCC was not included in the totals, it was pointed out.

College staff members were asked to determine the percent of annual income spent within the state and within the college district. Staff members residing within the college district spent 88.45 percent of their income within the district and 93.7 percent within Oregon. Those residing outside the district spent 48.26 percent of their income within the district and 64.58 percent within the state.

The number of jobs created by TVCC was another factor studied by the survey. Because of the college, 889 Oregonians are provided full-time equivalent jobs. Of these, 144 jobs are directly within the college, and the remainder are the result of money being circulated within the college district.

(See TVCC, page 2)

- 71 -

74

75

Mail
(Clr. W. 2,455)

APR 15 1982

Allen's PCB

OVER $½ BILLION IMPACT

Community colleges help boost economy

Oregon's community colleges have just completed a study of the economic impact they have on the state of Oregon. The study finds that more than 550 million dollars were in circulation within the Oregon economy because of the colleges' existence.

In Douglas County alone, Umpqua Community College contributes over 15 million dollars and generates the equivalent of 1,370.

"The study's definition of economic impact is the money in circulation within the state due to the existence of the community colleges," said Dr. Mike Stevenson, statewide study coordinator and director of research at Mt. Hood Community College.

"The total impact for the colleges includes the direct and indirect economic effect the institutions generate," Stevenson added.

The direct impact is the sum of the appropriate institutional, staff, and student expenditures within the state. The indirect impact is the product of the direct impact times a multiplier that represents the way the initial expenditures are spent and respent by others in the state.

The direct impact of the community colleges totaled $276,495,331. This total is composed of $150,554,639 in in-state student spending, $65,363,308 in in-state college staff spending, and $60,377,384 in in-state spending by the colleges.

At least an additional $276,495,331 were in circulation within the Oregon economy due to the indirect effects of spending and respending. Thus, the total impact of the community colleges reaches a total of $552,990,662.

In addition to studying the statewide impact, the colleges also collected data regarding the economic impact each of the community colleges has on its own district, the amount of money in circulation compared to taxpayer dollars invested, the number of jobs existing in Oregon because of the colleges, and the alternatives community college students would take if the colleges did not exist.

Return greater than cost

The Oregon community colleges receive revenue from state appropriations, local property taxes, and student tuition and fees. The colleges received a total of $102,477,054 in state and local tax revenues during the 1980-81 academic year and returned more than five times that amount ($552,990,662) to circulate within the Oregon economy.

This demonstrates that while the community colleges are primarily justifiable on the basis of providing needed education and services to their districts, they also make a significant return to the state's economy for each tax dollar received.

Data on the number of Oregon jobs attributable to the existence of the community colleges included the number of full-time and part-time employees of the colleges as well as data on the number of indirect jobs created by the colleges.

36,000 jobs created

An equivalent of 6,657 full-time employees were employed by the colleges and another 29,342 full-time equivalent jobs existed because of the money in circulation due to the colleges.

Examples of such college related, indirect jobs are grocery store employees, real estate people, gasoline station employees, and public officials. While no one job may be directly attributable to college expenditures, parts of many jobs are combined into the reported full time equivalent jobs.

Without the Oregon community colleges, an unmeasured negative financial impact would have occured for the students who would have attempted to attend an out-of-district college.

Making college possible

The study found that without the existence of Oregon community colleges, approximately 43,629 Oregonians would not have attended college during the winter term of 1982. And 32,155 Oregonians would have attempted to attend an out-of-district college.

This study is significant because all of Oregon's community colleges completed in using consistant procedures which produced comparable results for the 1980-81 academic year. The study's significance was further enhanced by the use of an independent study consultant, Dr. Mary Kinnick of Kinnick & Associates.

For more information about the statewide economic impact study, contact Dr. Mike Stevenson at Mt. Hood Community College in Gresham.

Report To The Stockholders

ECONOMIC IMPACT OF BLUE MOUNTAIN COMMUNITY COLLEGE - 1981-82

Based upon a recent college survey, completed in conjunction with a state study, the impact of Blue Mountain Community College on Pendleton and the surrounding area for the 1980-81 year was as follows:

* Local direct expenditures by students	$ 3,845,520
* Local direct expenditures by full-time faculty and staff	1,827,547
* Local direct expenditures by the college for supplies & equipment	1,149,394
* LOCAL DIRECT AND INDIRECT ECONOMIC IMPACT	$ 11,939,306

(A $4.50 RETURN IS REALIZED FOR EVERY $1.00 COLLECTED IN PROPERTY TAXES IN THE COLLEGE DISTRICT.)

(A $32.00 RETURN IS REALIZED FOR EVERY $1.00 COLLECTED IN PROPERTY TAXES IN THE CITY OF PENDLETON.)

OTHER ECONOMIC FACTORS:

* WORKFORCE -

83	Faculty and Administrators
200+	Part-time Faculty and Staff
45	Support and Confidential Staff
90+	Student Workers
1,017	JOBS DUE TO THE COLLEGE (Direct & Indirect)

PHYSICAL PLANT

BUILDINGS & EQUIPMENT - $16,295,191

ADDITIONAL FACTS:

* The College contributes to the stability of the local economy;
* Provides significant community services and cultural programs;
* Generates long-range economic impact through developing human resources - skilled employees and employers;
* Creates opportunities for adults as well as the community's youth for quality academic education and new careers at a low cost; and,
* Keeps local students in our area and brings other students in - KEEPS THOSE DOLLARS IN THE COMMUNITY!

3/10/82

SALEM STATESMAN-JOURNAL
SAT. APRIL 3, 1982

Community colleges say they are worth millions to economy

By JOHN FUREY
Of the Statesman-Journal

Every time community college students buy gas or groceries, or pay their rent, they affect the economy around them.

Likewise, their school stimulates business when it contracts for services such as pouring cement or printing class schedules.

School staff members also pay for food, housing and local products.

AN INDIVIDUAL may ask, how much money flows through the state's 13 community colleges, their students and staff?

For the first time in Oregon history, an independent study was done to answer that and other related questions.

Results of the study, released last week, showed Oregon community colleges circulated an estimated $550 million in the state last year. The schools received more than $102 million in state and local tax revenues, the survey stated.

THE STUDY also showed an estimated 36,000 full- and part-time jobs were generated through community colleges and related expenditures.

Chemeketa Community College circulated about $76 million statewide, including $59 million in Marion, Polk and Yamhill counties, the study showed. About 550 jobs were linked to Chemeketa, the study showed.

"The study's definition of economic impact is the money in circulation within the state due to the existence of the community colleges," said Mike Stevenson, statewide study coordinator and director of research at Mount Hood Community College.

THE STUDY WAS done by each school, under the direction of an independent study consultant, Mary Kinnick of Kinnick & Associates, Portland. Although community colleges previously have done their own economic impact studies, this was the first time all schools joined together for a study and used the same model.

The study was sponsored by the Oregon Community College Association.

Paul Guthrie, Chemeketa institutional research specialist, said the Salem school rated average when compared with other state community colleges and their relationships to the local communities they serve.

IN ADDITION to studying the statewide and local impact of community colleges, the schools also studied the amount of money in circulation compared to taxpayer dollars invested, and the alternatives the schools' students would take if the college did not exist.

Students accounted for the biggest percentage of expenditures, the survey showed.

For example, Chemeketa students spent an estimated $38 million in the state, $33 million of that in the tri-county area, Guthrie said.

OTHER SURVEY findings:

- If Chemeketa did not exist, an estimated 997 full-time and 5,032 part-time students would not attend any college during winter term of 1982. Another 1,991 full-time and 3,031 part-time students would have attended a college outside the district.
- Oregonians invest more than $13.5 million in local and state taxes to Chemeketa. The college, Guthrie said, is responsible for returning six times that amount — $75.6 million — to the Oregon economy.

Study: BMCC pumps millions into county economies

By JIM EARDLEY
of the East Oregonian

PENDLETON — Blue Mountain Community College's economic impact on Umatilla and Morrow counties totaled almost $12 million for the 1980-81 year, a recently completed study says.

Ellsworth E. Mayer, dean of academic planning and research for the college, said the study showed direct expenditures by students, faculty and staff and the college came to about $5.8 million and the direct and indirect economic impact in the two counties that make up the college district totaled $11,939,306.

The BMCC survey was part of a state study commissioned last fall by the Oregon Community College Presidents' Council to measure the economic impact of the community colleges on the state's economy. Each community college submitted data from its own district based upon the 1980-81 academic year. The study was coordinated by the Office of Research at Mount Hood Community College.

Mayer said the survey showed that BMCC students spent $3,845,520 for college-related activities, expenditures by full-time faculty and staff totaled $1,827,547, and the college spent $1,149,394 in Umatilla and Morrow counties for supplies and equipment.

The total direct expenditures of $6.8 million were multiplied by .75 to obtain the indirect impact. Mayer said the multiplier that was used was very conservative. Some state studies have used 2.5 and 3.0, he said.

The indirect impact weight accounts for money spent a second or more times in the local economy.

The average student cost per year for a full-time student was about $3,660, not including tuition and fees, according to the study, and the average student cost per year for a part-time student was about $790, not including tuition and fees.

Monthly costs for 822 full-time students and 1,652 part-time students in the fall of 1980, averaged $189.29 for housing, $102.23 for food, $96 for transportation, and $79.63 for other things. Term costs averaged $146.08 for tuition and fees and $89.48 for books.

The BMCC survey showed there were 1,017 jobs, direct and indirect, because of the college, Mayer reported. The direct work force included 83 faculty and administrators, more than 200 part-time faculty and staff, 45 support and confidential staff and more than 90 student workers.

The Blue Mountain students indicated they spent about 91 percent of their college-related expenses in Umatilla and Morrow counties; the staff indicated they spent 83 percent of their disposable income in the college district; and the college spent about 45 percent of its total supplies and equipment expenditures in Morrow or Umatilla counties.

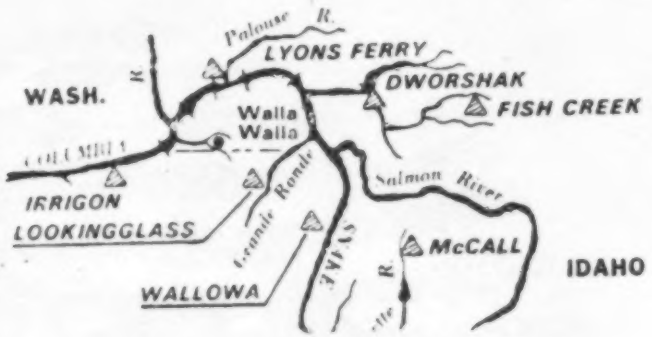
More than 42 percent of the students surveyed said they would not attend college if BMCC did not exist, and about 57 percent of the students surveyed said they would attend another college if BMCC did not exist.

The statewide impact by BMCC, according to the study, totaled about $18.5 million.

The impact in Oregon of the state's 13 community colleges and an area education district was $630 million, the study said.

First gathering should be routine

EOH task force set to meet



PENDLETON — Discussion of the future of Eastern Oregon Hospital is scheduled to start Tuesday as a task force named by Gov. Vic Atiyeh and Northeast Oregon legislators gathers here for its first meeting.

The meeting is set for 10 a.m. at the EOH medical library, according to Bob Reese, Pendleton, chairman of the group.

Members are Dr. Al Baxter, EOH superintendent; Bruce Barnes, Umatilla County Mental Health program administra-

mental health care is needed in Eastern Oregon and if EOH should continue to provide that care.

A study of the economic impact to the community, if EOH operations are significantly reduced, is the second phase of the study.

Atiyeh, state Sen. Mike Thorne, D-Pendleton, and state Rep. Bob Harper, R-Ilelix, established the task force and appointed its members. State and Northeast Oregon economic in-

1983-85 biennium budget proposal.

The superintendent is ready to recommend to the task force a new facility to house mentally retarded institutional residents who have relatives in Eastern Oregon. The 120-bed facility would replace the large, rambling building in west Pendleton. Baxter said the facility would accommodate all residents from Eastern Oregon currently in state institutions.

Baxter didn't say so, but the

LCC generates jobs for 844 full-time employees and for 4,118 outside the college—the report states—because of the money LCC puts in circulation.

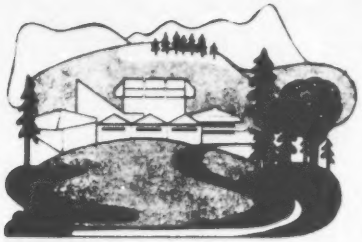
The latter includes such indirect jobs as grocery store workers, real estate people, gasoline station employees, and public officials. While no one job may be directly attributable to LCC expenditures, parts of many jobs are combined into the reported full-time equivalent positions.

The report indicates that your college, in addition to providing educational services you need and want, also provides a significant return to the economy for each tax dollar received.

Those interested in reading the full report may contact Julie Aspinwall-Lamberts, associate director, Productivity Center, LCC.

Lane Community College is an equal opportunity institution and complies with all state and federal nondiscrimination education and employment requirements. Questions about the college's equal opportunity policies should be directed to the Assistant to the President, Lane Community College, 4000 E. 30th Avenue, Eugene, OR 97405. Phone: (503) 747-4501, ext. 2301.
7/82

Invest a dollar, get back four



Economic Impact Study
Lane Community College
4000 East 30th Avenue
Eugene, Oregon 97405

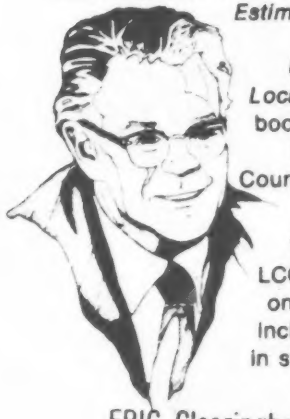
By Eldon G. Schafer
President, Lane Community College

Invest a dollar; get back more than four in the same year. An impossible return on investment? Not so, say economists.

A study of Lane Community College's economic impact, based on economists' models, shows a tax investment of $16,195,065 in 1980-81 and a combined, direct and indirect return of $72,728,642 to Lane County and Oregon.

Data about LCC's impact comes from a statewide study on community college economic returns done through the Oregon Community College Association (OCCA) at Salem. Statewide, the report indicates, the 15 community college districts add $550 million to the economy.

The study was based on the widely accepted economic principles and procedures advocated by John Caffrey and Herbert Isaac in their book, *Estimating the Impact of a College or University on the Local Economy*. The book was published by the American Council on Education (ACE) in 1971.



The study shows LCC's direct impact on the economy to include $14,863,887 in student spending, $11,113,330 in spending by college employees, and $10,387,104 spent by LCC for materials and supplies. Total direct impact: $36,364,321.

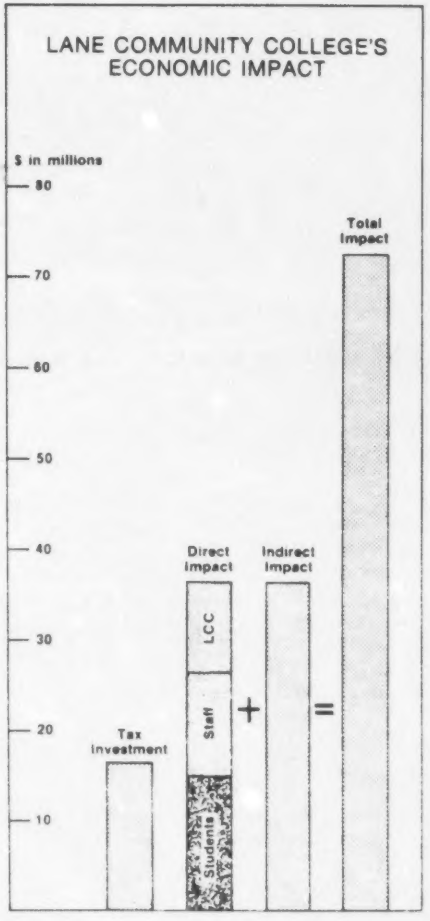
The indirect impact, say economists, at least equals the direct impact as it filters through the economy. When the direct and indirect impacts are combined, the total impact is more than $72.7 million.

The Caffrey-Isaac formula suggests a larger indirect impact, but Oregon community college researchers chose to use a conservative approach. By comparison, university studies of some Oregon industries have shown the indirect impact as four times the direct spending.

As a result, the independent research consultant who oversaw the community college study called its figures "highly conservative" and suggested that they "most likely underestimate the true impact." Dr. Mary Kinnick of Kinnick & Associates, Portland, audited the design, data processing procedures, and findings of the study.

If LCC didn't exist, 2,752 students said they would have left the county to go to college. The report indicates they spent an estimated $4,751,484 in the area. That includes their share of the $4,718,720 in financial aid received from federal, state, and other sources and dispensed through LCC.

Also used as models were applications of the Caffrey-Isaac model at community colleges. Included were James Tschechtelin's *Economic Impacts of Maryland Community Colleges*, 1977, and Ivan Lach's *The Economic Impact of Six Community Colleges in Illinois*, 1979.



The study also found that 8,212 Lane County residents wouldn't have attended college at all winter term, 1982, if LCC were not in existence.

ERIC Clearinghouse for Junior Colleges
96 Powell Library Building
University of California
Los Angeles, California 90024
DEC 3 1982